

April 16, 2007

Ms. Lila Tang  
Chief, NPDES Permitting Division  
SF Bay Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

*Sent via electronic mail to ltang@waterboards.ca.gov*

**RE: Draft NPDES Permit and Waste Discharge Requirements for Municipal and Industrial Wastewater Discharges of Mercury to San Francisco Bay**

Dear Ms. Tang:

On behalf of Baykeeper, NRDC, Clean Water Action, and their members, thank you for the opportunity to review and comment on the tentative NPDES permit and Waste Discharge Requirements for Municipal and Industrial Wastewater Discharges of Mercury to San Francisco Bay, NPDES Permit No. CA 0038849 ("draft permit").

We support the Regional Board's decision to issue one permit for all dischargers in order to avoid reopening more than fifty permits. We strongly oppose, however, using the group permit as a means to circumvent federal and state permitting requirements. Substantial changes must be made to the proposed effluent limitations and monitoring requirements to ensure a permit that is both legally and environmentally sound.

In addition to our comments below, we note that the State Water Resources Control Board ("SWRCB") has yet to approve the San Francisco Bay Region's Water Quality Control Plan ("Basin Plan Amendment" or "BPA") to establish a Total Maximum Daily Load ("TMDL") for mercury, upon which this permit is based. We have received staff's assurances that this permit will not issue before the SWRCB acts on the BPA. However, we reiterate our request that, if changes are made to the BPA, the public comment period for this permit be reopened.

**1. Compliance. Individual mass limits must be enforceable regardless of group performance.**

Our most significant concern is the proposed permit's lack of enforceable mass limits for individual discharges, which contravenes federal law and is inconsistent with the TMDL. Federal law requires permit effluent limits be established for "*each* outfall or discharge point" of a permitted facility. 40 C.F.R. § 122.45(a) (emphasis added); 40 C.F.R. § 123.25 (making requirements applicable to State programs). Permit effluent limits for each discharge point must be expressed in terms of mass. *Id.* at 122.45(f)(1). Therefore, every permit must contain mass limits applicable to every discharge point.

These mass limits must also be enforceable. When permits limits are expressed in terms of mass and another "unit of measurement," such as concentration, "the permit shall require the permittee to comply with both limitations." *Id.* at 122.45(f)(2) (emphasis added). When a permittee fails to comply with any permit limitation, the Regional Board, EPA, and citizens with standing may bring suit to enforce them. *See* 33 U.S.C. §§ 1319, 1365;<sup>1</sup> Cal. Water Code § 13385.

The draft permit language defining compliance with mass effluent limits in terms of group performance attempts to bypass these legal requirements. While it contains mass limits applicable to each discharger, it does not require constant compliance with those mass limits. Rather, the draft permit exempts the discharger from compliance with legally mandated mass effluent limits as long as the group limit is not exceeded. Making the mass limits enforceable in only limited circumstances blatantly disregards permitting requirements spelled out in the CWA and its implementing regulations.

Conditioning permit compliance on group performance is also inconsistent with the TMDL approved by this Regional Board in August of 2006. Federal regulations require that all effluent limits in permits be "consistent with the assumptions and requirements of any available wasteload allocation" in a TMDL. 40 C.F.R. § 122.44(d)(1)(vii)(B). The Bay mercury TMDL states how the Regional Board will exercise its enforcement discretion, stating the Regional Board's intent to "pursue enforcement actions against those individual dischargers whose mass discharges exceed their mass limits." BPA at 18, 20. The draft permit, however, goes beyond an articulation of enforcement discretion and defines *compliance* with effluent limits in terms of group performance. Draft Permit at 12, 14. This distinction is significant in that it appears to prevent all parties—the Regional Board, EPA, and citizens with standing—from enforcing the individual mass limits when the group limit is not exceeded.

We also object to the group compliance regime because it appears to encourage de facto trading wherein mercury reductions at one facility enable another facility to discharge more mercury than allowed by its individual limit. Bioaccumulative pollutants are unsuitable for trading, whether explicit or implicit. *See* EPA Water Quality Trading

---

<sup>1</sup> In providing for citizen enforcement, Congress explicitly recognized that government often lacks the means or will to enforce water quality laws. *See* S. Re. No. 414, 92d Cong., 1<sup>st</sup> Sess. 2-3 (1971). This is why Congress specifically authorized enforcement suits by any private person with standing.

Policy (January 13, 2003) (available at <http://www.epa.gov/owow/watershed/trading/tradingpolicy.html>). Furthermore, the group compliance regime lacks the formal safeguards—such as a trading association and procedures for formally adjusting post-trade effluent limits—of established trading programs. To ensure that the permit is consistent with federal law and the TMDL, it must contain mass limits, based on the TMDL WLAs, that are enforceable at all times against individual dischargers.

***Requested Change:*** Revise Footnote 1 of Tables 6 and 8:

Compliance with the Average Annual Mass Limitations is determined annually for each Discharger each calendar year. The Water Board will pursue enforcement actions against those and is attained if the sum of the individual Dischargers' whose mercury mass emissions, calculated as described below, is not are greater than the aggregate mass their individual emission limits...

**2. Anti-backsliding. The permit contains effluent limits that unlawfully “backslide” from current permit limits.**

If adopted as currently written, this permit violates federal anti-backsliding requirements because it contains permit limits less stringent than those in current permits. The Clean Water Act's anti-backsliding provisions provide that, in general, “a permit may not be renewed...to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.” 33 U.S.C. § 1342(o)(1). These provisions were adopted specifically to further the CWA's goal of *eliminating* pollutant discharges entirely. 49 Fed. Reg. 37,898, 38,019 (Sept. 26, 1984).

The proposed permit, however, contains effluent limits that are less stringent than those in current permits because the average monthly effluent limitations (“AMELs”) for at least five dischargers<sup>2</sup> are higher than those in their current permits. No question exists about whether the proposed AMELs are “comparable” to the current limits. Both are interim limits and are based on current performance, so less stringent limits are inappropriate. *See* SWRCB Order WQ 2001-06 (reasoning that a WQBEL is not “comparable” to a performance based limit); *NRDC v. EPA*, 859 F.2d 156 (D.C. Cir. 1988) (upholding EPA's authority to prohibit backsliding from BPJ-based permits).

The proposed permit also appears to backslide from previous permits because it lacks maximum daily effluent limitations (“MDELs”). The AMELs in the draft permit are comparable to those in current permits, but nothing in the draft permit is comparable to the MDELs contained in most dischargers' current permits. Complete removal of a permit limit clearly constitutes backsliding. Any final permit must specify an MDEL for each discharger that is at least as stringent as the one in its current permit.

---

<sup>2</sup> These dischargers are: Petaluma, San Jose/Santa Clara, South Bayside, Sunnyvale, and Tesoro. Tesoro's limit is especially troubling because it is more than three times its current performance-based limit. Draft Permit at F-10, 20.

Exceptions to the backsliding prohibition are narrow and not applicable here. Under section 303(d)(4)(1), effluent limits based on a WLA may be relaxed provided that the cumulative effect of all revised limits ensures attainment of the applicable water quality standard. The current permit limits, however, are not based on a WLA, therefore, the section 303(d)(4)(1) exception does not apply. Even if section 303(d)(4) applied in situations where only the current permit limit is based on a WLA, the Regional Board's own analysis in the TMDL shows that the WLAs will not achieve water quality standards for many decades after this permit expires. Thus, the cumulative effect of the revised limits does not ensure attainment of the water quality standard and the section 303(d)(4)(1) exception is inapplicable.

Similarly, none of the exceptions outlined in section 402(o)(2) apply. There have been no material and substantial alternations to the facilities. 33 U.S.C. § 1342(o)(2)(A). No new information is available that would have justified less stringent standards in the current permits. *Id.* at 1342(o)(2)(B). No events have occurred over which the permittees have no control, but which justify a less stringent limit. *Id.* at 1342(o)(2)(C). The permittees have not received permit modifications. *Id.* at 1342(o)(2)(D). Finally, the permittees have not installed the treatment facilities required to meet the effluent limits in the current permit. *Id.* at 1342(o)(2)(E). Because none of the situations contemplated by section 402(o)(2) exist, no exception to backsliding is warranted.

Finally, even if one of the exceptions to the backsliding rule applied, section 402(o)(3) bars less stringent limits in this situation. Section 402(o)(3) acts as a floor to restrict the situations in which the State can relax limits. It prohibits relaxation of limits if it would cause the receiving waters to violate applicable state water quality standards. 33 U.S.C. § 1342(o)(c). Because the Bay is already impaired for mercury, any increase in the amount discharged by a particular discharger constitutes an exceedance of applicable water quality standards. Therefore, the proposed limits must be at least as stringent as current limits.

***Requested Changes:*** To ensure compliance with antibacksliding requirements, the draft permit should be amended to incorporate AMELs and MDELs for each discharger that are at least as stringent as those in current permits.

**3. Concentration-Based Effluent Limitations. The concentration-based effluent limitations must be protective of water quality.**

The Clean Water Act requires that all permits for the discharge of pollutants contain effluent limitations sufficient to achieve all applicable water quality standards. C.F.R. § 122.44(b)(1), (d). WLAs are a type of water quality based effluent limitation. *Id.* at § 130.4(h). They do not supersede, however, all other water quality based effluent limits. As recognized by EPA guidance, "[t]he goal of the permit writer is to derive permit limits that...protect against acute and chronic impacts...and assure attainment of the WLA and water quality standards. EPA Permit Writers' Manual, p 111 (emphasis added). Thus, if

the WLA-derived permit limits are not sufficient to protect against acute and chronic impacts, then the permit must contain additional limits.

It is unclear whether the limits in the proposed permit are adequate to achieve all applicable water quality standards, including those related to toxicity. Current permits issued by this Regional Board contain WQBELs based on the Basin Plan's criteria for protection of salt water aquatic life from toxicity. While these limits are not yet in effect, they are substantially lower than the limits in the proposed permit. This suggests that lower concentration-based limits may be necessary to protect against toxicity and to implement the Basin Plan's acute toxicity criteria of 2.1 µg per liter. We ask that the Regional Board demonstrate how the proposed limits will ensure compliance with all applicable water quality standards, including those for toxicity.

***Requested Change:*** Provide more detail in the fact sheet to demonstrate that compliance with the permit effluent limitations will also ensure compliance with the one-hour marine water quality objective of 2.1 µg per liter, or revise the permit to ensure compliance with that and any other applicable objective.

**4. Effluent Limits. The permit must contain Maximum Daily Effluent Limitations.**

As discussed above in the backsliding context, the draft permit incorrectly fails to include MDELs. Federal and state regulations require that permits for continuous discharges contain MDELs. 40 C.F.R. § 122.45(d); SWRCB, *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, p. 10 (2005). As recognized by the Regional Board, MDELs are effective at protecting against acute water quality effects, including preventing mortality to aquatic organisms. See Order No. R2-2007-0024, RWQCB, San Francisco Bay Region, Waste Discharge Requirements for the Pinole-Hercules Wastewater Treatment Plant (adopted March 14, 2007). Failure to include them in this permit is unjustified and illegal.

***Requested Change:*** In addition to the mass limits and the AMELs, the permit should assign each discharger an appropriate MDEL.

**5. Monitoring. More frequent monitoring is necessary to determine compliance with effluent limitations.**

We are concerned that the monitoring frequency required in the draft permit is insufficient. Federal regulations require that all permits contain monitoring sufficient to assure compliance with permit limitations and to generate data that is representative of the monitored activity. 40 C.F.R. §§ 122.44(i), 122.48(a). Although the permit requires compliance with AMELs, it only requires monitoring monthly or quarterly. We fail to see how monthly or quarterly monitoring will generate data sufficient to determine

compliance with AMELs, which by definition suggest the averaging of more than one sample each month.

Furthermore, the record lacks any evidence that the monitoring requirements will produce data that will be representative of the discharges or that will enable a compliance determination. EPA guidance specifies several factors to be considered in determining the appropriate monitoring frequency. These factors include the variability of the pollutant in the discharge, the discharger's history of compliance, and the number of monthly samples used in developing the permit limits or effluent guidelines. *U.S. EPA NPDES Permit Writers' Manual*, EPA 833-B-96-003, pp. 119-122 (December 1996). None of these factors appear to have been considered in determining monitoring frequency. Instead, the fact sheet erroneously and unpersuasively concludes that the monitoring frequencies are justified by each discharger's contribution of mercury and its resources to conduct the monitoring. Consideration of either these factors is not relevant under federal regulations and will not necessarily lead to representative data.

***Requested Change:*** The monitoring requirements must be increased so that they are sufficient to produce data that (1) is representative of the discharge and (2) enables a determination of compliance with effluent limitations. The fact sheet must also be amended to demonstrate how federal regulations and guidance were applied to arrive at the appropriate monitoring frequency.

**6. Triggers. The triggers are too high to prevent mass limit exceedances.**

The draft permit illogically sets concentration limits for American River Canyon, PG&E, Rhodia, and Mirant Potrero that are lower than the applicable MDEL and/or AMEL triggers. Specifying triggers that are higher than the applicable limit essentially makes the triggers meaningless because, by the time the additional requirements are triggered, the discharger is already in violation.

***Requested Change:*** Unless the Regional Board can demonstrate that the rolling average trigger is sufficient to serve as an early detector of exceedances, the dischargers should be assigned new triggers that are less than their concentration-based limits.

**7. Source Control, Special Studies, and Risk Management. The permit should specify the level of effort required by each discharger and emphasize risk reduction.**

We strongly support the source control, special studies, and risk management requirements contained in the permit but note that the permit needs more specificity. Other than the dental program, none of the draft permit provisions specify the level of effort required by each discharger.

More importantly, the risk management requirements are insufficient. As eloquently stated by representatives of local environmental and community groups during a December 2006 meeting sponsored by the Clean Estuary Partnership, education and outreach are of limited value when people depend on fishing local waters for sustenance. Risk reduction needs to go beyond signage and, ultimately, provide community-based alternatives to Bay-caught fish. We ask that the risk management section be changed to emphasize provisions c and d, related to health-risk assessments and communication and investigating ways to reduce actual and potential exposures.

***Requested Change:*** (1) Amend the Special Provisions related to source control, special studies, and risk management so that they state how much effort—in terms of funding, programs and results—are required of the dischargers. (2) Revise the risk management section to emphasize risk reduction provisions c and d instead of mere signage.

**8. Recycled Water. Demonstrate that increases in the total mercury discharged will not cause local effects.**

We support the use of recycled wastewater by industrial dischargers and appreciate the Regional Board's efforts to facilitate reuse. We are, however, concerned that the increase of mercury discharged by the industrial permittee may have unintended local effects. Although the total amount of mercury being discharged does not increase, the mass being emitted at a particular discharge point will. The permit and accompanying fact sheet should discuss how the permit will ensure that the increase does not result in local impacts or a violation of receiving water limitations.

***Requested Change:*** Include in the permit and fact sheet an analysis of potential local impacts and how the permit will address them.

**9. Noncompliance Reporting. Require written reporting of all noncompliance.**


We ask that the Regional Board require written reporting of all noncompliance. While we recognize that provision E.3. (page D-9) is a standard provision laid out by federal regulations, we strongly urge the Regional Board not to accept oral reports in lieu of written ones. A written record of compliance enhances transparency and facilitates outside review of compliance and should be required in all situations.

***Requested Change:*** Revise the permit to require written reporting of all noncompliance regardless of whether an oral report is provided.

\*\*\*

Again, thank you for consideration of these comments. We encourage you to contact us with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sejal Choksi', written over a light blue rectangular background.

Sejal Choksi, Esq.  
Baykeeper

Michael Wall, Esq.  
NRDC

Michelle Mehta, Esq.  
NRDC

Andria Ventura  
Clean Water Action

cc: Alexis Strauss, Environmental Protection Agency  
Bruce Wolfe, San Francisco Regional Water Quality Control Board